

“object”, “image”, “text”, “text box”, and the like can replace a “figure” in the first embodiment.

[0142] In FIGS. 20A to 22, an object selected in the user interface window as shown in FIG. 6 is edited. The characteristic arrangement of this specification makes it possible to, while displaying the preview image of a page selected in the main pane 601 of FIG. 6, edit an object contained in a page different from that of the displayed preview image.

[0143] FIG. 24 shows processing executed by the word processing application program 403 on the basis of a selected projected image.

[0144] When the operator selects a projected image (S2401), the word processing application program 403 determines whether the selected projected image is a vertically projected image or horizontally projected image (S2402). More specifically, the word processing application program 403 executes the processing in S2402 by looking up the tables shown in FIGS. 8A to 8C and the like and specifying a projected image corresponding to selected position information.

[0145] If the word processing application program 403 determines in S2402 that the vertically projected image is selected, it permits horizontal editing processing (S2404). If the word processing application program 403 determines in S2402 that the horizontally projected image is selected, it permits vertical editing processing (S2405). Since the word processing application program 403 permits vertical processing by the above processing in response to selection of, e.g., the horizontally projected figure (synonymous with the horizontally projected image) 613 in FIG. 11, it displays the command box 1110 associated with the vertical direction. Also when the operator selects the vertically projected figure (synonymous with the vertically projected image), the word processing application program 403 displays the command box 1210 to permit horizontal editing processing.

[0146] As described above, the first embodiment can provide a user interface capable of improving operability in editing a document of a plurality of pages. The user interface enables intuitive editing work, and the user can efficiently edit figures between pages.

[0147] [Modification 1]

[0148] FIG. 14A shows an example of adjusting the positions of figures in a plurality of pages by using the three-directional view 600. The user is to simultaneously align a figure 1402 present in the second page and a figure 1403 present in the third page to the bottom of a figure 1401 present in the first page. In this case, the user executes processing by right-clicking on the figure 1401 in the horizontal projection pane 602 and executing an “adjust to the bottom of the figure” command 1404. As a result of alignment, the tops of the FIGS. 1402 and 1403 are aligned to the bottom of the figure 1401. FIG. 14B shows the result of alignment. As a result of performing the processing in FIG. 14A, the user can align the top of text 2 in the second page and that of text 3 in the third page to the bottom of title 1 in the first page. This processing is different from the flow in the first embodiment in the process of step S1903 to check whether a plurality of figures are selected and the process of step S1904 to validate a command. Modification 1 can omit these two processes because alignment can be done using an unselected figure as a reference. The remaining processes

such as storage of information in the pane-information storage table are the same as those in the first embodiment.

[0149] [Modification 2]

[0150] In the first embodiment and modification 1, when figure objects projected in each of the horizontal and vertical projection panes overlap each other in the projection direction, projected objects also overlap each other. For example, the object 612 and an object 615 overlap each other in the vertical direction, as shown in FIG. 6. Thus, the vertical projection pane displays the vertically projected image 614 of the overlapping objects. It is difficult to determine, from the vertically projected image 614, that the vertically projected image 614 contains the two projected objects.

[0151] To solve this problem, it is also possible to display the horizontally and vertically projected images of overlapping objects in the horizontal and vertical projection panes, respectively. In this case, objects overlapping in the projection direction are displayed on rows or columns shifted from each other. FIG. 23 shows an example of this layout. The vertical projection pane for the first page displays a vertically projected image 2301 of the object 612, a vertically projected image 2303 of the object 616, a vertically projected image 2304 of the object 617, and a vertically projected image 2302 of the object 615 at positions vertically shifted from each other. This also applies to the horizontal pane.

[0152] To the contrary, the user may select one projected image to select a plurality of objects corresponding to the position and size of the projected image. For example, the objects 612, 616, and 617 match each other in position and size in the vertical direction, as shown in FIG. 6. In this state, the user selects the segment 614 to select the objects 612, 616, and 617. By selecting one projected image, the user can also edit a plurality of objects.

[0153] In this fashion, when the vertical and horizontal projection panes for one page have slots for parallel-displaying the projected images of a plurality of objects, even images displayed in the vertical and horizontal projection panes allow the user to identify respective objects. The degree of freedom in selecting an object of a page not displayed in the main pane increases, and the operability further improves.

[0154] [Modification 3]

[0155] In the first embodiment, the horizontal and vertical projection panes display the projected images of all pages contained in document data. In modification 3, however, the horizontal and vertical projection panes display the projected images of pages separately selected from document data. In this case, the operator is prompted to designate the range of pages to be displayed in the user interface before the procedures in FIG. 18. According to the procedures in FIG. 18, the three-directional view displays only pages within the selected range. With this setting, the user interface window can display only limited pages to be edited in a document having many pages. When the document data file has a hierarchical structure, data can be selected for each node. For example, combining document data into one node every break facilitates selecting an edit target.

[0156] Even when creating, e.g., a continuous business form as described above, the user can easily edit a field